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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,923	12/03/2001	Isabelle Conesa	110652	3020

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EXAMINER

GRAY, JILL M

ART UNIT PAPER NUMBER

1774

DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/936,923	Applicant(s) CONESA ET AL.	
	Examiner Jill M. Gray	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 7-24, 27-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 25-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

The rejection of claims 2 and 25 under 35 U.S.C. 112, first paragraph is moot in view of applicants' amendments.

The rejection of claims 1-6 and 25-26 under 35 U.S.C. 103(a) as being unpatentable over Ferziger et al, 4,801,493, in view of Dias et al, 4,256,786 and Hudecek et al, 3,971,744 is withdrawn upon further consideration and in view of applicants' arguments.

The rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Great Britain Publication No. 2,079,801 A (Bridge) in view of Hudecek et al, 3,971,744 is withdrawn upon further consideration.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an intumescent agent being present in the composition in an amount of between 50 and 200% by weight, does not reasonably provide enablement for the intumescent agent being present in any amount, in particular, amounts lower than 50% by weight and, the specification is enabling for a composition wherein the intumescent agent comprises at least one strong-acid compound. Also, the specification is enabling for the plasticizing medium comprising

Art Unit: 1774

predominantly, by weight an organic phosphate (note page 4 of the specification). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. In particular, the specification on page 4 as originally filed, discloses that the "proportion by weight of the intumescent agent is between 50 and 200%". In addition, on page 6, lines 23-25 of the specification disclose that the intumescent agent of the composition of the invention comprises at least one strong-acid compound. The term "intumescent agent" encompasses a host of compounds, both inorganic and organic, that are not disclosed in the specification. Regarding the plasticizing medium, this language encompasses a host of plasticizers not disclosed in the specification, and would result in undue experimentation to determine which plasticizers would function as intended in the composition. Accordingly, the claims are not commensurate in scope with the specification.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

More specifically, claim 2 is indefinite because claim 1 does not specify the plasticizing medium as comprising/being a phthalate or a phosphate, and claim 2 does not properly further add these components. Accordingly, there is insufficient antecedent

basis for the phthalate or phosphate of claim 2 and thus, the metes and bounds for which patent protection is being sought are not clear.

Claim 4 is indefinite because claim 3, from which it depends, defines the plasticizing medium as comprising an organic phosphate. Claim 4 does not further add the phthalate to the phosphate plasticizing mediums but seeks to change the plasticizing medium from a phosphate to a phthalate, which is improper for a dependent claim. Accordingly, the metes and bounds for which patent protection is being sought are not clear.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Great Britain Publication No. 2,079,801 A (Bridge).

Bridge is as set forth previously and teaches a composition comprising one or more dehydrateable polyols such as pentaerythritol, a dehydrating agent which may be a free strong acid such as ammonium polyphosphates, a lubricant such as silicone oil, a plasticizer, and an acrylic latex binder. See page 1, lines 41-58. It should be noted that though Bridge does not specifically refer to his dehydrateable polyol (pentaerythritol) or free strong acid dehydrating agent (ammonium polyphosphate) as "intumescent agents" he teaches the same components as those disclosed by applicants as intumescent agents. Accordingly, the composition of Bridge is inherently fire-retardant. Because Bridge teaches that his composition can contain a plasticizer, it is the examiner's position that the composition of Bridge necessarily is in the plastisol state. As to the composition exhibiting at low shear rates Newtonian rheological behavior with a viscosity of less than 6000 mPa.s and exhibiting at high shear rates, pseudoplastic rheological behavior, the composition of Bridge is substantially the same as that contemplated by applicants, namely, a composition comprising an acrylic resin and an intumescent agent, wherein the composition comprises a plasticizing medium in which the acrylic resin and the intumescent agent are dispersed. Accordingly, the examiner has reason to believe that the composition of Bridge exhibits the same behavior at low shear rates and at high shear rates as the presently claimed composition. Moreover, it would have been obvious to modify the amount of plasticizer in the composition commensurate with desired properties of the end composition. For example, adjusting the amount of plasticizer would adjust the viscosity of the composition thereby allowing the composition to be a paste or flowable.

Therefore, the teachings of Bridge anticipate and in the alternative, render obvious the invention as claimed in present claim 1.

8. Claims 1-2 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Langer 5,523,059.

Langor teaches an intumescent sheet formed from a composition comprising an intumescent agent, organic binder material such as an acrylic, and a plasticizer, per claim 1. See column 3, lines 23, 35, and 46-65. In addition, Langor teaches that his intumescent material is present in an amount of 25-60 weight percent, per claims 2 and 6. See abstract. Because Langor teaches that his composition contains a plasticizer, it is the examiner's position that the composition of Langor is in the plastisol state. As to the composition exhibiting at low shear rates Newtonian rheological behavior with a viscosity of less than 6000 mPa.s and exhibiting at high shear rates, pseudoplastic rheological behavior, the composition of Langor is substantially the same as that contemplated by applicants, namely, a composition comprising an acrylic resin and an intumescent agent, wherein the composition comprises a plasticizing medium in which the acrylic resin and the intumescent agent are dispersed. Accordingly, the examiner has reason to believe that the composition of Langor exhibits the same behavior at low shear rates and at high shear rates as the presently claimed composition. Moreover, it would have been obvious to modify the amount of plasticizer in the composition commensurate with desired properties of the end composition. For example, adjusting the amount of plasticizer would adjust the viscosity of the composition thereby allowing the composition to be flowable.

Therefore, the teachings of Langor anticipate or in the alternative would have rendered obvious the invention as claimed in present claims 1-2 and 6.

9. Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Merry 5,686,039.

Merry teaches a flowable mounting material used as a coating on a substrate, said coating comprising an intumescent agent and a binder that can be an acrylic resin, further teaching that the binder can include a plasticizer, per claim 1. See column 3, lines 55-58, column 5, lines 29-35, and lines 66-67, column 6, line 2. In addition, Merry teaches that the plasticizer can be a phosphate and that it is present in an amount within applicants' range, per claims 2 and 3. Also, the intumescent agent of Merry is within applicants' range as required by claim 6. See column 5, lines 33-34 and column 6, lines 24-28. Because Merry teaches that his composition contains a plasticizer, it is the examiner's position that the composition of Merry is in the plastisol state. As to the composition exhibiting at low shear rates Newtonian rheological behavior with a viscosity of less than 6000 mPa.s and exhibiting at high shear rates, pseudoplastic rheological behavior, the composition of Merry is substantially the same as that contemplated by applicants, namely, a composition comprising an acrylic resin and an intumescent agent, wherein the composition comprises a plasticizing medium in which the acrylic resin and the intumescent agent are dispersed. Accordingly, the examiner has reason to believe that the composition of Merry exhibits the same behavior at low shear rates and at high shear rates as the presently claimed composition. Moreover, it would have been obvious to modify the amount of plasticizer in the composition

Art Unit: 1774

commensurate with desired properties of the end composition. For example, adjusting the amount of plasticizer would adjust the viscosity and allow the composition to be flowable or more of a paste, commensurate with the desired end use.

Therefore, the teachings of Merry anticipate or in the alternative, render obvious the invention as claimed in present claims 1-3 and 6.

10. Claims 2-6 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Great Britain Publication No. 2,079,801 (Bridge), as applied above to claim 1, in view of Hudecek et al, 3,971,744.

Bridge is as set forth above but is silent as to the specific plasticizer. Hudecek teaches a method for forming emulsions, dispersions, and pastes, said method consisting of polymerizing monomers in a plasticizing medium. The monomers can be acrylic based monomers and the plasticizers can be phosphates or phthalates, per claims 2-4. See column 2. This teaching would have provided a suggestion to the skilled artisan that plasticizers such as phosphates and phthalates could be used in compositions containing acrylic resins with a reasonable expectation of success of providing the desired physical and processing properties to the resultant composition. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the composition of Bridge by using as the plasticizer any plasticizer known in the art, such as those taught by Hudecek with the reasonable expectation of obtaining the efficacious physical and processing properties associated therewith when used in a composition. As to claims 5 and 25, Hudecek teaches amounts of the plasticizing medium within applicants' range. See Examples. As to

claims 6 and 26, it is the examiner's position that since the result sought and the ingredients used were known, it was within the expected skill of one having ordinary skill in this art to arrive at the optimum proportion of this ingredient. Moreover, fire retarding compositions comprising intumescent agents are known in the art. Accordingly, it is also the examiner's position that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.

Therefore, when considered as a whole, the combined teachings of Bridge and Hudecek would have rendered obvious the invention as claimed in the present claims.

11. Claims 5 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merry, 5,686,039, as applied above to claims 1-3 and 6.

Merry is as set forth above but does not teach the amount of plasticizer and intumescent agent as claimed by applicants in claims 5 and 25-26. In this regard, it is the examiner's position that since the result sought and the ingredients used were known, it was within the expected skill of one having ordinary skill in this art to arrive at the optimum proportion of this ingredient. Moreover, fire retarding compositions comprising intumescent agents are known in the art. Accordingly, it is also the examiner's position that where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.

Response to Arguments

12. Applicant's arguments filed March 24, 2005 have been fully considered but they are not persuasive.

Applicants argue that Bridge does not, as is evident from its abstract, disclose or suggest the inclusion of an intumescent agent. Applicants additionally argue that Bridge does not disclose or suggest that its coating composition is in a plastisol state or has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates as set forth in claim 1.

Agreeably Bridge discloses "a non-intumescent, char-forming composition" in his abstract. However, this disclosure in the abstract does not preclude the clear teaching of Bridge on page 1, lines 44-48, and Examples, of the inclusion of known intumescent agents, such as ammonium polyphosphate in his composition. Clearly Bridge teaches a composition that comprises an intumescent agent, as does applicants. The fact that Bridge teaches that his composition is non-intumescent, does not negate his teachings of the inclusion of an intumescent agent. Applicants are reminded that the subject matter defined by the invention as presently claimed in claim 1 only requires that composition comprise an intumescent agent. As set forth above, the fact that Bridge teaches the inclusion of a plasticizer in his composition necessarily results in a composition in the plastisol state. As to the composition exhibiting at low shear rates Newtonian rheological behavior with a viscosity of less than 6000 mPa.s and exhibiting at high shear rates, pseudoplastic rheological behavior, again, as set forth above, the composition of Bridge is substantially the same as that contemplated by applicants, namely, a composition comprising an acrylic resin and an intumescent agent, wherein

Art Unit: 1774

the composition comprises a plasticizing medium in which the acrylic resin and the intumescent agent are dispersed. Accordingly, the examiner has reason to believe that the composition of Bridge exhibits the same behavior at low shear rates and at high shear rates as the presently claimed composition.

Applicants argue that Hudecek does not remedy the shortcomings of Bridge and does not disclose or suggest the inclusion of an intumescent agent, as set forth in claim 1. Applicants further argue that Hudecek does not disclose or suggest that its coating composition is in a plastisol state or has Newtonian rheological properties at low shear rates and pseudoplastic rheological properties at high shear rates, as set forth in claim 1.

In this regard, Hudecek is relied upon for all that he would have reasonably imparted to one of ordinary skill in the art at the time the invention was made, namely, that the usage of phthalate and phosphate plasticizers with acrylic resins was well known in this art at the time of the invention thereof. The inclusion of a plasticizer in the composition of Bridge necessarily results in a composition in the plastisol state and it would have been an obvious expedient to the skilled artisan to adjust the viscosity of the composition commensurate with the desired coating process.

No claims are allowed.

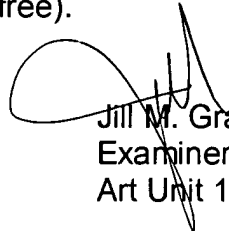
Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Examiner
Art Unit 1774

jmg